

JULY 1, 1954

VOL. 28

No. 1

THE WINNER!

See Page 13

THE FORTNIGHTLY

Review

OF THE CHICAGO DENTAL SOCIETY

THE JOHN C. GREER LIBRARY

RECEIVED
JUL 2 - 1954
RECEIVED

TICONIUM

tru-rugae

CAST CASES



now better than ever!

You can now offer your patients more comfortable, "personalized" partial or full dentures. Tru-Rugae cases duplicate each patient's rugae exactly — produce greater phonetics — adapt to the tissue quicker!

Ticonium laboratories now use an exacting new technique to produce Tru-Rugae cases! These Ti-Lectro polished cases accurately reproduce the rugae on both the tissue and tongue side. Each case is made to feel better — fit better — look better.

Serving dentistry for 20 years . . .

TICONIUM

413 No. Pearl St., Albany 1, N. Y.

Community Dental Laboratory

4013 Milwaukee Avenue, Chicago 41, Illinois
Phone: AVenue 3-1312

M. E. Naughton Dental Laboratory

7854 South Eberhart Avenue, Chicago 19, Illinois
Phone: STewart 3-2808-09-10

Ideal Dental Laboratories

4805 Fullerton Avenue, Chicago 39, Illinois
Phone: BErkshire 7-0868—7-0869

Pollack Dental Laboratory

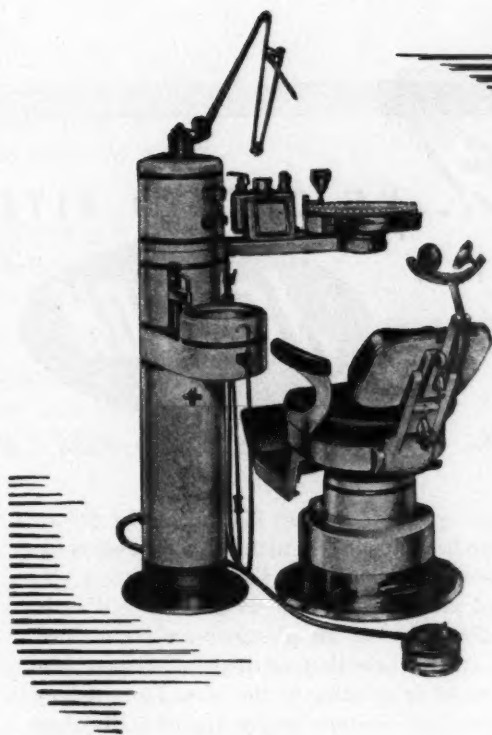
3154 West 63rd Street, Chicago 20, Illinois
Phone: REpublic 7-7100—7-7101

Jung Dental Laboratory

4707 North Broadway, Chicago 40, Illinois
Phone: LOngbeach 1-6349

Southwest Dental Laboratory

4204 Archer Avenue, Chicago 32, Illinois
Phone: LAfayette 3-4994-5



How to attract and **HOLD** patients

The most modern equipment in your office will influence patients to your benefit today, tomorrow and in the years to come. The S. S. White Master Unit and Motor Chair are distinctive for beauty of design, convenience to the dentist and comfort for the patient.

You owe it to yourself to see and operate this outstanding equipment at your first opportunity.

Free Office Planning

THE S. S. WHITE DENTAL MFG. CO.
CHICAGO, ILL. **PEORIA, ILL.**

What!...NO OPENED BITES?

...NOT WITH

JECTRON

The Best Fitting Denture Ever Made

The occlusal accuracy of JECTRON dentures is far greater than has heretofore been attainable with other denture resins processed by conventional methods. For JECTRON is a specially-compounded polystyrene resin—long recognized as the most dimensionally stable of all plastics—and is molded, *fully cured*, by a special injection method which precludes distortion of the mold or opening of the bite. Thus tedious occlusal adjustment and denture fitting are virtually done away with, and the satisfaction of the patient definitely enhanced.

You whose constant aim has been to achieve superior results in your denture practice will welcome this perfected material which so fully reflects the accuracy of your impressions and bite registrations. And you will appreciate the many other advantages of these superbly-fitting, ultra-strong dentures which mean greater satisfaction to you and your patients.

Let us demonstrate these outstanding advantages by constructing your next few cases of JECTRON—the *best fitting denture ever made*.

THE JECTRON LABORATORIES ON THE OPPOSITE PAGE WILL SERVE YOU



EVANSTON DENTAL LABORATORY

708 Church Street
Telephone University 4-9290

EVANSTON

IDEAL DENTAL LABORATORY

4805 Fullerton Avenue
Telephone BERkshire 7-0868

CHICAGO

MARS DENTAL LABORATORY

3955 West 26th Street
Telephone CRawford 7-2544

CHICAGO

M. E. NAUGHTON DENTAL LABORATORY

7854 South Eberhart Avenue
Telephone STewart 3-2808

CHICAGO

ORAL ART LABORATORY, INC.

25 East Washington Street
Telephone DEarborn 2-4141

CHICAGO

A. J. SCHROEDER LABORATORIES

4032 Milwaukee Avenue
Telephone AVenue 3-4710

CHICAGO

SOUTH SUBURBAN DENTAL LABORATORY

15331 Center Avenue
Telephone HARvey 1001

HARVEY

STEEL CITY DENTAL LABORATORY

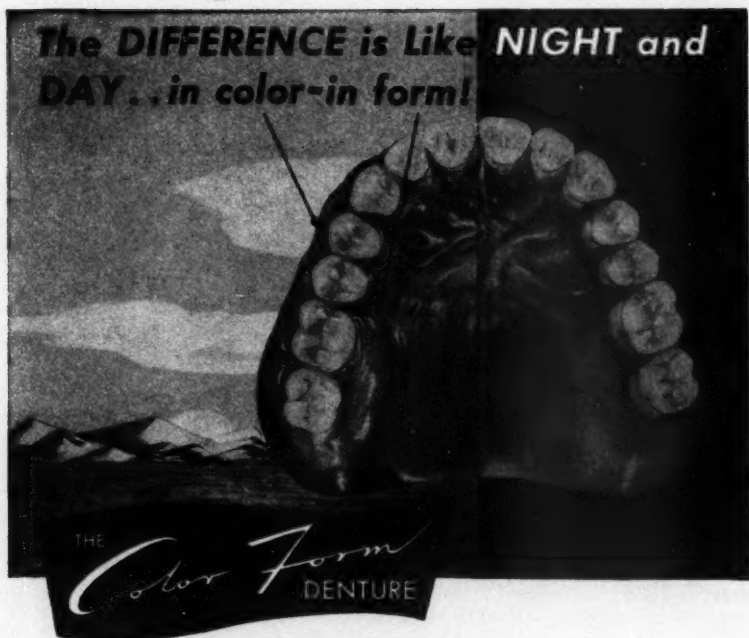
9206 South Houston
Telephone ESsex 5-3262

CHICAGO

J. THOMPSON DENTAL CO.

7 East 79th Street
Telephone Vincennes 6-4212

CHICAGO



YEARS AHEAD . . . TODAY! TWIN ADVANCEMENTS IN DENTAL PROSTHETICS

Both denture form and color are treated with a new understanding in the **COLOR-FORM** concept of the design and construction of full dentures. This has as one goal the re-development of the edentulous mouth to a normal form so that esthetics, phonetics and function alike are restored, and expression in appearance and speech are completely natural.

The other goal is life-like color blending. This color treatment is cured within the denture and provides unique and amazing third-dimension fidelity to natural dentition. When these goals are achieved, as in the **COLOR-FORM** denture, the result is a distinctive contribution to dental prosthetics—years ahead—one that must be seen to be appreciated.

Phone or write for details.



STANDARD DENTAL LABORATORIES OF CHICAGO, INC.

EST. 1922

Telephone to All Depts. DEarborn 2-6721

225 N. WABASH AVE.

CHICAGO, ILL.

The Fortnightly
REVIEW
OF THE CHICAGO DENTAL SOCIETY

Number 1
July 1, 1954
Volume 28

| | |
|---|----|
| Nitrous Oxide-Trichloroethylene Anesthesia in Dentistry (Clinical Study) <i>By Max S. Sadove, M.D., Leonard F. Kowalski, M.D., and Zenon J. Krol, D.D.S., Chicago, Illinois</i> | 7 |
| The Winner—37 to 8! | 13 |
| News and Announcements | 14 |
| Abstracts <i>James N. Lynch, D.D.S., Evanston, Illinois</i> | 15 |
| Are You Careful of Your Personal Appearance? | 16 |
| News of the Branches | 17 |
| Society Directory | 19 |
| Ethics Committee | 19 |

EDWARD J. SULLIVAN
KARL S. RICHARDSON

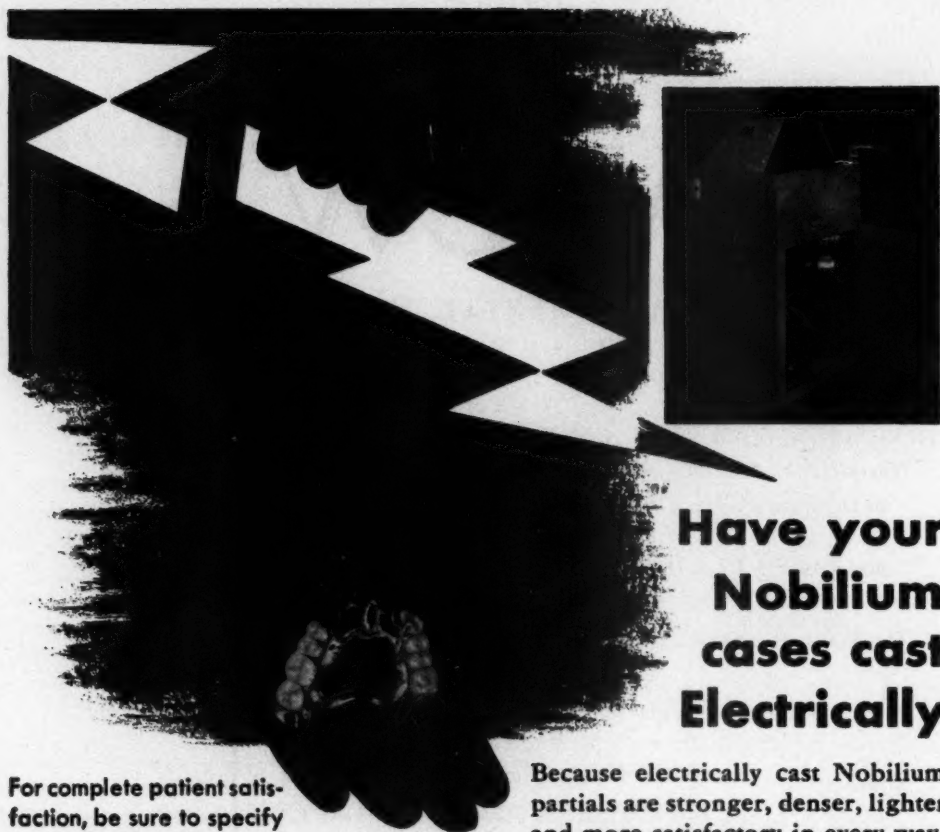
EDITOR
BUSINESS MANAGER

Contributions: Manuscripts should be typewritten, double spaced, and the original copy should be submitted. Every effort will be made to return unused manuscript, if request is made, but no responsibility can be accepted for failure to do so. Anonymous communications will receive no consideration whatever.

Manuscripts and news items of interest to the membership of the society are solicited.

Forms close on the first and fifteenth of each month. The early submission of material will insure more consideration for publication.

Published semi-monthly by the Chicago Dental Society. Publishing, Editorial and Advertising Office: 30 North Michigan Avenue, Chicago 2, RAndolph 6-4076. Annual subscription \$2.50; single copies 15 cents; circulation 5,300 copies.



Have your Nobilium cases cast Electrically

For complete patient satisfaction, be sure to specify Nobilium Electric Casting!

Because electrically cast Nobilium partials are stronger, denser, lighter and more satisfactory in every way, a rapidly increasing number of laboratories are installing the finest casting machine made today—the machine that employs an inert gas to protect the alloy from the atmosphere. Processing impurities and oxidation are completely eliminated!

Provide your patients with partials that are the closest approach to perfection yet possible. Check the localities listed below. If your laboratory has not yet

installed the Nobilium Electric Casting Machine, ask that your cases be entrusted to an official Nobilium processing laboratory established to serve them until they can get the necessary equipment. Your laboratory can obtain this service for you.

Nobilium Electric Casting Machines are in operation in the following cities.

Others are rapidly being installed.

Abilene, Texas
Austin, Texas
Bryan, Texas
Chicago, Ill.
Columbia, S. C.
Dallas, Texas
Dayton, Ohio
Denver, Colo.
Des Moines, Iowa
Detroit, Mich.
El Paso, Texas
Fort Worth, Texas
Grand Island, Nebr.
Houston, Texas
Hutchinson, Kans.
Indianapolis, Ind.
Los Angeles, Cal.

Marshfield, Wis.
Miami, Fla.
Milwaukee, Wis.
New Albany, Ind.
New Orleans, La.
New York City, N. Y.
Oklahoma City, Okla.
Orlando, Fla.
Philadelphia, Pa.
Pittsburgh, Pa.
Port Arthur, Texas
Princeton, W. Va.
St. Paul, Minn.
San Francisco, Cal.
Sioux City, Iowa
Toronto, Ontario
Washington, D. C.

Nobilium PRODUCTS, INC.

125 North Wabash Avenue, Chicago 2, Ill.
914 Walnut Street, Philadelphia 7, Pa.

Nobilium Products of Canada, Limited
7 Brunswick Avenue, Toronto 4, Canada

The Fortnightly **REVIEW** *of*

THE CHICAGO DENTAL SOCIETY

July 1, 1954

Volume 28 • Number 1

Nitrous Oxide-Trichloroethylene Anesthesia in Dentistry† (Clinical Study)

Max S. Sadove, M.D.,* Leonard F. Kowalski, M.D.,* and
Zenon J. Krol, D.D.S., Chicago, Illinois

This department has in the past made studies of dental anesthesia and analgesia utilizing trichloroethylene, nitrous oxide, and combinations of these agents, chiefly in the clinics of the University hospital.^{1,2} Objection was made that this does not represent nor can it be interpreted as representing the average clinical practice in America. We therefore set about in an attempt to make a study that would be more representative of the average exodontia practice. Exodontia was chosen since it represented the field in which nitrous oxide-trichloroethylene anesthesia was most frequently used. One of the authors, L.F.K., was chosen as the anesthesiologist, Z.J.K. as the exodontist, and M.S.S. to organize and analyze the data. An office was chosen that was representative of the average smaller office in America in which one chair was available for doing the exodontia and a small adjoining room was available for a modified type of recovery room. The two individuals who

represented the dental anesthesia team were unfortunate enough during the early part of the study not to have a nurse; but in the greater proportion of the study, they were aided by a nurse-technician. This, therefore, could be said to have all of the essentials, but the minimal essentials for an adequate dental anesthetic team. Work sheets were organized from which data would be later collected since in most instances studies without adequate work sheets are mere impressions, subject to caprice and the memory with all of its frailty and hazards. These work sheets were made at the time of each case.

CASE SELECTION

All of the patients studied were Caucasian, but they represented various nationalities, economic, and sociologic strata usually encountered in the average clinical practice in a large city such as Chicago. The ages represented were from 2 to 68. One thousand and thirty cases were studied over a period of nine consecutive months. For approximate analysis of the age group in these patients, 35% were 6 years of age or under, 28% were from 7 to 12 years of age. Thus

*From the University of Illinois College of Medicine, Department of Surgery (Anesthesiology).

†Presented at the Midwinter Meeting of the Chicago Dental Society, February 10, 1954.

children represented 63% of the total number of cases. The 13 to 45 year old group constituted 36% of the entire group. Thus it is apparent that only 1% of the cases were over 45. In the adult group there were 6 pregnant females, 2 in the first trimester and 4 in the second trimester. No anesthetics were given to patients in their third trimester of pregnancy.

From this breakdown of the age group, several interesting facts become apparent. First and foremost is the fact that there is a great desire and a great need for dental anesthesia in children. One of the causes for the patients being anesthetized was the children's inherent fear of the needles since they had had so many needles during vaccinations, immunizations, and antibiotic therapy, etc., until many had developed an inherent fear of needle therapy. In many instances it was the wish of the parent that the extraction be done under general anesthesia to sustain as little psychic trauma as possible. In other instances they simply wanted the child to "sleep" during the procedure. Of course in many instances the child wanted the tooth out but wanted no needles or general anesthesia. Some of these children may have been good candidates for hypnosis or suggestion for induction of a state that was conducive to the utilization of this, the nitrous oxide-trichloroethylene technique. It is our firm belief that hypnosis cannot be used to extract teeth in these children without psychic trauma in a high proportion of cases. It certainly can be used to create a much more pleasant state wherein general anesthesia or local anesthesia will be acceptable. The time factor, the failure factor, the fright and psychogenic background factors all make hypnosis therapy for these children an extremely difficult procedure in the average clinical practice. It is an interesting observation that among the patients over 13 years of age there were two times as many females as males. One wonders what conclusions can be drawn from this fact.

It is of interest that in this over 45-year age group will come most of our

serious organic illnesses; yet it represents only 1% of the total group given general anesthesia in the office. Whether this is because these patients are more frequently done in the hospital, whether they are more frequently done under local anesthesia, or what this means is not clearly apparent. However, it has been said by many that the older age group are more stoic individuals and can be done by local anesthesia adequately.

We firmly believe that the ideal anesthetic for the dental office is still some form of regional anesthesia. However, one must not draw from this a conclusion that the psychically vulnerable individual, simply because he appears calm, should be traumatized unnecessarily. The ability to do local anesthesia does not necessarily make it the ideal anesthesia for the individual patient, nor does the ability to do general anesthesia make it the ideal anesthetic for a patient. It may be stated that general anesthesia is indeed a more hazardous technique than regional anesthesia. Yet, many individuals have sustained psychic trauma out of all proportion to that justifiable for this slight increased degree of safety. The safety of many forms of local anesthesia is much less than that of general anesthesia performed by the expert.

Lest it be misunderstood, it should be pointed out that 85 to 95% of all the cases were done because they were referred to this team for the purposes of exodontia under general anesthesia. Thus, this study must be taken in this light—it does not represent the true needs of an exodontist in his practice unless he has with him an adequate anesthetic team.

CASES REJECTED

Six cases were rejected during the nine months this study was in progress. One case was a coronary of recent origin in which it was the opinion of the surgical-dental team that this case should be done in a hospital or delayed until a more careful evaluation could be made of the patient. The second case was that of an enlarged thymus which was known to the

parents and had been of sufficient size to cause the child respiratory difficulty and had been treated by x-ray. The child had had no recent x-rays nor an adequate physical examination to determine the extent or type of pathology present. He was therefore referred back to his physician for re-evaluation. He did not return, so it is not known what the true physical condition of the child was at the time presented.

Four cases of impactions that in the estimation of the dentist would require considerable length of time were refused general anesthesia. The reason for refusing these cases was the lack of adequate recovery room space and facilities in this particular set-up for patients to rest for periods approaching one-half to one hour. It is contemplated that these cases will be done in the future since steps have been taken to make adequate facilities available for these cases.

It may be interesting to point out that among those having organic diseases there were 4 "coronaries" of fairly recent origin (6 to 12 months) that were carefully evaluated and then general anesthetized with no sequelae. It should be pointed out, however, that no patient who sustained a "coronary accident" should be done within the first 6 months of this "coronary episode" as an out-patient procedure. There were 6 very severe hypertensives who had anesthetics; none of these individuals or any in this study had any serious sequelae from the anesthetic procedure.

ROUTINE PREOPERATIVE EVALUATION AND MANAGEMENT

Each patient prior to being given his anesthetic is carefully questioned as to whether or not he had eaten in the last 4 hours and whether he had any food or drink. Even the emergencies were delayed 4 hours at the very least prior to having a general anesthetic administered. No exception was made to this rule. All were asked what general anesthetic they had had, for what condition, and what had happened preceding, during, or fol-

lowing the anesthetic. This applied to both local and general anesthesia. They were asked as to what treatment they had, what drugs, medicines or chemicals they were now using or had used in the past, and what doctors they had visited and for what cause. In other words every attempt was made by questioning to discover if there had been any recent illnesses, accidents, or factors that may be contributing to an increased hazard for general anesthetic. It was emphasized that this was meant to include any "doctor," physician, chiropractor, naturopath, any practitioner of the healing arts regardless of type and any form of medicine or drug, since too frequently these patients present themselves after having been treated by individuals practicing the healing arts, yet not physicians. Frequently the patient knows that he is taking some "white pills" and that is all. It is by contacting the individual physician that one learns that there is an organic disease present. In many instances the patient is not aware of the illness or its severity.

Prior to taking the patient into the dental chair, one assures himself again that the patient has just previously gone to the lavatory. One also checks that the individual who is to accompany the patient to his or her home is in attendance. The patient is then placed in the chair and the nose checked to see that there is adequate patency since this anesthetic will be administered by nasal route. The mouth is then checked to see that there is nothing that may become loosened by the placement of the bite block or may become loosened during induction of anesthesia. The mouth must be checked carefully; the patient's word can never be taken in place of an actual inspection since we have frequently found such varied objects as chewing gum, tobacco, crucifix, stones, good luck pieces, charms, etc. Females are asked to remove their earrings. If the young lady has high-heeled shoes she is asked to take off these shoes. A towel is put under her feet since it is very easy to break the heel of a shoe or sprain an ankle should the individual sustain an increased muscular tone in the

lower limbs during the anesthetic procedure. Wrist watches are removed from the patient and anything in the pockets, such as pens or glasses that could easily be broken by slight pressure, are removed and put aside. The tie and any tight constricting belts are loosened.

Care must be taken at this time that the patient is assured that there will not be a great deal of struggling. He is informed that this is a routine precaution to prevent the possibility of damage to personal items. One naturally is frightened if one thinks there is to be a great deal of struggling and fighting so that these precautions must be done carefully, gently, and quickly.

It was the intention of this team at the very onset to utilize no premedication whatsoever and thereby determine the necessity for premedication. This was accomplished in all but 4 cases. In these 4 instances, preoperative sedation was utilized. The drug used was phenobarbital gr. $1\frac{1}{2}$ in a capsule by the oral route 2 hours prior to the operative period and was given because of extreme nervousness on the part of the patient. It was administered primarily as a psychogenic tool rather than for the extreme degree of sedation expected from this route, dosage, and drug. These patients were seen in the office and noted to be very nervous. They were given a prescription for the phenobarbital and told to return at a specified time for the anesthesia. We hope that as this study progresses we will be able to report more concisely on the value of various types of premedication and their value to the dental operation. However, it is significant that in this group of more than 1000 cases only 4 patients were given premedication and yet this type of anesthesia was adequate for all but 1 patient.

Prior to the induction, during the time that the patient is being questioned as to his health, he is observed carefully for signs of airhunger and for signs of anything that could be interpreted to mean severe organic disease. Such things as cyanosis, ankle edema, shortness of breath would immediately make the team go

into careful history with regard to these signs. Any doubt in the mind of the surgical team would make it mandatory that the case be cancelled until such time as corroboration of the physical state could be obtained from the physician in charge of the case. This is neither the time nor the place, even though the anesthesiologist in this case has the ability and skill necessary, to make an excellent determination of the patient's physiologic state; he should refer them to the physician concerned and consult with him on the problem.

The patients are told the mask will be placed over their nose, that they will be able to breathe normally with no interference with respiration, and that there will be no unpleasantness. There will be a sense of floating, of warmth, tingling and off to sleep they will go to emerge after the tooth is removed without any sensations that will disturb them. Care is taken to avoid words such as dizziness, nausea, vomiting, various words that are associated with anesthesia which may prove a suggestible factor and be a detriment to the patient.

There should be no noise during the time of induction. The patient should be talked to in a quiet, reassuring voice from the time he approaches the chair until the time he leaves the dental office. The chair is placed in a 10° inclination toward the horizontal. The headrest is adjusted and then the restraints are placed in position. One should be very careful to emphasize that the purpose of these restraints is to keep the patient from sliding in the chair and assuming a position that would not be conducive to good careful work. Assure them that it is entirely a matter for their own protection so that their arm does not fall over the side and that they don't slide in the chair. The first is placed across the hips, care being taken that it does not encroach upon the abdomen and interfere with abdominal respiration. Another set of restraints is placed between the hips and the knees. The lowest restraint is placed loosely at mid-leg level. One belt is strapped loosely across the chest and

arms so that it is just above elbow level. The hands themselves are not strapped down since this is extremely frightening to most individuals. The hands are folded in the lap, the fingers interlaced with suggestion to the patient that as he goes to sleep he squeeze and tighten his hands together. One notices that if this is done, it is extremely difficult for the patient to pull his hands apart during the induction.

Children are placed in the "Indian squatting" position. A strap is then placed over the leg and thigh in such fashion as to immobilize the lower limbs. These straps are placed obliquely from the usual cross chest position to the lower portion of the chair so that the child cannot kick his legs about or move away from the back of the chair.

ANESTHETIC TECHNIQUE

The technique used for the accomplishment of anesthesia in these patients was a nitrous oxide-anesthetic technique utilizing trichloroethylene as a supplemental agent. Nitrous oxide-oxygen mixture was never so used that the oxygen concentration in any of these patients was less than room air or 21%. The only factor to diminish this concentration was the trichloroethylene that was added to this 21% mixture as it went across the vaporizer. Thus at the very least the percentage of oxygen was always within a fraction of 1% of the 20% level. We hold to the basic premise that there is never any justification for the utilization of a technique that requires hypoxia or hypoxemia. Oxygen tensions of less than 20% are neither justified nor necessary with this technique. We hold that any technique that does utilize hypoxia carries with it the implication or the possibility of hypoxia damage to the brain. Even though this damage may not be clinically discernible by the average clinician, it is quite within the realm of possibility that psychometric analysis or testing may bring forth damage or that this damage may be of such latency as to develop with time, disease, or further trauma. Regardless of whether this premise

be true or not, hypoxia carries with it such dreaded potentialities that it is never justifiable in clinical medicine.

Nitrous oxide with adequate concentrations of oxygen is probably one of the most innocuous therapeutic agents utilized by man. In spite of the millions of administrations of nitrous oxide over a period of years, it is indeed a rarity to even have this agent implicated, much less have it proven that it has done any damage. It is always the exclusion of oxygen that has been responsible for the accident. Its chief disadvantage is its weakness. It is because of this weakness that trichloroethylene is added to this mixture in an attempt to attain the ideal in dental out-patient anesthesia. It must be pointed out that trichloroethylene is indeed a potent agent capable of doing harm as well as of being a rather benign agent. When one utilizes trichloroethylene in high concentration as a primary agent attempting to utilize it for deep surgical anesthesia, it begins to show many of the pharmacologic effects that resemble chloroform. It becomes viscerotoxic to such organs as the kidneys, the liver, and the heart. However, it should be pointed out that in this technique, concentrations, duration and quantity of the drug are of such a nature that its toxicologic properties can be ignored with the exception of a very few contra-indications. These contra-indications are:— this drug should not be used on the individual who has heart disease characterized by extra nodal rhythms, multiple ventricular systoles nor should it be used upon those patients who have very severe kidney, liver, or heart disease. However, in all fairness it should be clearly stated that it is in our opinion preferable to use this technique of adequate oxygen and trichloroethylene than it is to utilize a technique which has hypoxia as one of its concomitants.

Local anesthesia may be used where desired in conjunction with this technique; however, trichloroethylene being incompatible pharmacologically with epinephrine and drugs resembling epinephrine, no local anesthetic solution

containing epinephrine should be used when this technique is employed. Local anesthesia itself is not incompatible and may be used with excellent results prior to or during general anesthesia. It will in all probability make the anesthetic much more effective, much easier to administer. Although the need for this local anesthesia is rather rare, in those instances where the procedure is apt to be extremely long, it may be desirable once the patient is asleep to utilize a rapid acting local anesthetic for blocking out a regional area in the mouth and utilizing the general anesthetic for the production of narcosis, thus creating a state of balanced anesthesia.

A bite-block is inserted in the mouth. The nasal mask is placed firmly and comfortably over the nose, across the face and down toward the nape of the neck. The head is adjusted firmly and comfortably against the head support. The exhalation valve on the nose piece is opened and the flow of gases at a pressure of about 5 mm. Hg. for intermittent flow machines, or at a rate of flow of approximately 12 liters on the continuous flow machines, are started. The patient is permitted to take approximately 2 or 3 breaths without the mouth-piece; then the mouth-piece is gently but firmly put into place over the mouth. After approximately 8 to 10 breaths, during which time the patient is quietly and gently reassured that all is going well, the trichloroethylene is gradually introduced. One should take care that the trichloroethylene be started in the absolute minimum concentration, and that time not be lost in increasing it to an adequate concentration, but also that excessive speed not be made so that the patient will be frightened or made to cough. In the McKesson machine the rebreathing bag is set at the fourth notch and the spring tension about 4 to 6. In the Heidbrink machine, such as the simplex, one merely sets the flow as indicated and follows the same general principles. In general, one may say that with every third or fourth breath the regulating lever on the vaporizer is moved one full notch. In children this is accom-

plished very quickly; so that in most instances by the time the adjusting lever has reached half of the fully open position the child is in surgical anesthesia. In adults it may require as much as two-thirds of the potential opening of the vaporizer.

Once one is satisfied that surgical anesthesia has been acquired, the mouth-piece which had been placed over the mouth is quickly removed, and a pack is quickly put in place. If the case is to have a duration of more than 5 minutes, the patient is given half a minute of anesthesia with nitrous oxide-trichloroethylene prior to the removal of the mouth-piece. In short cases this is unnecessary. The pack must be carefully placed so that debris will not be aspirated and so that the gases will not easily be diluted by the room air. Care must be exercised not to obstruct the airway.

The patients are kept in an extremely light plane of anesthesia so that some movement and some muscular tension can be seen. It must be emphasized again that primarily this is a light nitrous oxide anesthesia wherein some of the added strength for this excellent, weak agent is gained by minute traces of trichloroethylene. An absorbent sponge is placed in the sockets of the teeth that have been extracted. We have not found it necessary to use a saliva extractor although we have always carefully used a suction machine. It must be emphasized that this suction machine must be of a variety capable of good negative pressure, something in the vicinity of 25 mm. Hg.

Nitrous oxide-oxygen mixture is maintained in a ratio of 79% nitrous oxide, 21% oxygen until the operative procedure is completed. As signs of increasing lightness develop that are incompatible with the work at hand, trichloroethylene is added to produce the desired depth.

The surgeon and anesthesiologist are in constant contact with each other during the entire procedure, each advising the other as to his progress and status, the anesthesiologist attempting to maintain the head in the position that will

(Continued on page 30)

THE WINNER!

37 - 8

June 16, 1954



When the Chicago City Council voted 37 to 8 on June 16 to fluoridate the city's water supply all the children of Chicago today and all of the people of Chicago of the years ahead became possessed of a priceless heritage of sounder and healthier teeth. All gratitude is due Alderman Cilella and all of the others, of the Society and not of it, who had a part in fostering fluoridation and to the aldermen who voted for it. Not often do so few do so much for so many.

NEWS AND ANNOUNCEMENTS

GOLF OUTINGS

North Suburban Branch golf outing and dinner—July 14—Thorngate Country Club.

West Suburban Branch golf outing and dinner—July 14—Itasca Country Club.

Loyola Alumni Association golf outing and dinner—September 15—Glendale Country Club.

ARE YOU INTERESTED IN PHOTOGRAPHY?

That's fine. A lot of other dentists are too and would like to know more about it—both for use in their offices and out. So Dr. Joseph C. Ullis at 2965 Milwaukee Avenue has suggested the organization of a group of dentists with a common interest in photography and would like to have everyone with any ideas on the subject call him at SPaulding 2-8851 and talk it over.

CHICAGO ACADEMY OF DENTAL PSYCHOSOMATICS ELECTS NEW OFFICERS

The new officers elected by the Chicago Academy of Dental Psychosomatics at its last meeting, May 14, are as follows: Directors—J. D. Mershimer and M. I. Gerry (past-presidents), R. A. Atterbury, J. McCarthy, A. G. Doner; president, B. H. Bartfield; president-elect, I. I. Selter; vice-president, M. Altus; secretary, E. P. Victor; treasurer, J. Rund; librarian, R. Marcus.

The program consisted of a talk by Dr. E. Victor, complete with a demonstration subject. The audience was all attention as Dr. Victor showed his methods of deepening the trance state on his subject. The latter portion of the program was devoted to a movie taken by Dr. Beck of the University of Oregon

and some slides taken by Dr. Victor. This meeting closed the official season of the Academy as well as my pleasant task of reporting the activities of the most progressive and largest hypnodontia group in the country, but I will see you in the fall. —Orrin Baumgarth, D.D.S., Chairman, Public Relations Committee.

C.D.A.A. NEWS

The annual meeting, closing the 1953-54 season of the Chicago Dental Assistants Association, was held at the Columbia Yacht Club. The Association was honored in having Dr. Joseph Zielinski, its sponsor, as the guest of the evening.

Following a delicious buffet dinner, the officers and chairmen gave their annual reports and the new officers were installed: Lorraine Scapillato, president; Dorothy Sutton, president-elect; Grace Dwyer, vice-president; Evelyn Fiske, treasurer; Mae Barkley and Mary O'Donnell, new board members.—Helen Vollmer, Publicity Chairman.

PERIODONTICS COURSES OFFERED BY LOYOLA

Two postgraduate courses are offered at Loyola University, School of Dentistry for the 1954-55 season under the direction of Dr. Balint Orban and staff.

"Problems of Occlusion in Periodontics" will be given October 21-23, 1954. Fee, \$100.00.

"Theory and Practice of Periodontics" will be given January 20-22, 1955. Fee, \$100.00.

Classes will be limited to twenty.

For further information, write to Dr. F. M. Wentz, Director of Postgraduate Division, 1757 West Harrison Street, Chicago 12, Illinois.

ABSTRACTS

TRANSITION FROM PARTIAL LOWER TO COMPLETE LOWER DENTURE

Among the numerous causes for a painful transition are the loss of original vertical opening, the development of pathologic patterns of occlusion, the premature contact of natural lowers to upper artificial teeth and the creation of tongue movements which cause further resorption.

Psychologically the patient may fear and resist going to a full lower denture for varied reasons. The dentist should attempt to determine these fears and to plan his treatment accordingly. The patient is informed of the difficulties ahead but told that while artificial teeth are not as good as healthy natural teeth, they are better than diseased natural teeth.

In many cases containing six lower anterior teeth, the bone is cancellous and when inadequate nutrition occurs, the presence of nutrient canals is noted. These canals result in irregular, rough and sharp points following extraction, causing many denture failures.

In a series of cases, duplicate lower dentures were constructed against a single upper. In one lower, the crest of the anterior alveolar ridge was relieved by adaptation of foil to the model. The other was constructed without relief. The patient was given both lowers and invariably found the relieved denture the more comfortable.

Surgical intervention does not help as there are more sharp points postoperatively than there were before. This is not normal bone.

This type of relief is also of advantage when the mental foramina are subject to pressure.

The teeth should be positioned on the lower ridge as closely to their natural position as possible. This prevents crowd-

ing of the tongue and allows the buccinator muscles to function.

The case should be examined periodically and should occlusal disharmonies develop correction should be made by either adjusting the occlusion or reclining the dentures.—*"The Troublesome Transition From a Partial Lower to a Complete Lower Denture,"* by J. T. Landa. *Journal of Prosthetic Dentistry*, January, 1954. J. N. L.

EXTENSIVE CARIES IN CHILDREN

The dental care of the subnormal, the very young, the spastic, or the child with whom reasoning is impossible can be performed under a general anesthetic. Cases must be selected. The child should be in good health and under a physician's care as anesthesia will be maintained from one to four hours.

The patients are hospitalized, premedicated with morphine and scopolamine or atropine and anesthetized with pentothalcurare and then maintained with nitrous oxide and 30 per cent oxygen through a tracheal tube. Work was performed in a dental chair.

On fifty-two patients of which twenty-seven were under age four, the number of surfaces restored for each child was 3 to 36, averaging 18 per patient. The average duration of anesthesia was 2 hours and 17 minutes.

Postoperatively, one child had difficulty breathing until the third day when she coughed up a blood clot. Two had laryngitis with edema from the tracheal tube. The rest were uneventful.

All preparatory work was completed but difficult cavities were filled at other office visits.—*"Extensive Caries in Children Treated Under General Anesthetic"* by J. T. Cohen and R. T. Knight. *North West Dentistry*, January, 1954. J. N. L.



ARE YOU CAREFUL OF YOUR PERSONAL APPEARANCE?

NEWS OF THE BRANCHES

SOUTH SUBURBAN

In spite of the weather which was anything but golfing weather, we had a wonderful turnout for our golf meeting. Among our guests we had some of the high brass from downtown—Sam Kleiman, Gus Solfronk, president and president-elect respectively; and Karl Richardson, the genial executive secretary. The evening was highlighted by several things among which were the excellent food, the brevity of the speeches and the wonderful liquid refreshments. Glowing tributes were paid by President Sam to some of the outgoing officers of our branch, especially for the very fine work done by Lloyd Bettenhausen and Leonard Holt. For the sake of those men not present I would like to state that South Suburban has finally found a place in the sun by the election of our own Mike Hughes to the office of secretary of the Chicago Dental Society. Space does not permit me to tell of the incredible amount of work done by Mike before his efforts were recognized and rewarded. We are all for you, Mike. . . . Another man whose work is also just being recognized is Neil Kingston, our newly installed director. Neil has done remarkably well on some of the committees on which he has functioned in the past. . . . Our new president, Ken Washburn, will be calling a meeting sometime this summer to organize his committees, and I am sure that he will be given the same sort of wonderful cooperation that was given his predecessor, Ezio Grossi. . . . Now for odds and ends of news: In attendance at the State meeting down at Springfield were Scanlan, Holt and Hughes of South Suburban. Leonard, as most of you know, is one of the councilmen for the State society. . . . Folkers of Blue Island recently flew down to Florida to pick up his family and return them to the northern climes for the summer months. Our

newlywed, Brookstra is busy putting a new wing on the new house out in Palos Park. . . . Smiley Simon journeyed up to the wilds of Minnesota to indulge in the piscatorial art. . . . Paulsen of Homewood is really covering some territory. First he is going down to the Lake-of-the-Ozarks for some fishing, then he will journey straight north to Green Bay to take care of some personal matters. . . . That's all for now. Let me hear from you, no matter where you go or may be going.—H. C. Gornstein, *Branch Correspondent*.

NORTHWEST SIDE

"Scoop" Davidson has done it again. Page 364, *Illinois State Journal*, June, 1954, bottom of right-hand column, verifies statement in this column that there would be a proposal that the dues of the state society be raised to \$15.00. The next State meeting will be held in Peoria, May 9-12, 1955. . . . The food at the Rogalski homestead stood up to previous levels. The annual meeting of the officers and committee chairmen of the branch produced an attendance of sixteen members. Cas Rogalski announced the following chairmen: Program, Joe Ullis; Sports, Thad Chrobak; Credentials, Lou Lebow; Ethics, Ted Krynski; Correspondent, Ben Davidson; Reception, John Gates; Membership, Ben Sachs; Civilian Defense, LaMar Harris; Information on Federal Health Legislation, Pete Wlodkowski; Dinner, Thad Czeslawski; Interprofessional, Glenn Cartwright; Attendance, Stan Broniarczyk; Public Relations, Don Mammen; Dental Health Education, Ben Davidson. This makes an excellent working staff. With such a fine group, it looks as though we should have a real year. . . . Joe Lebow as ticket chairman, and Mitch Kaminski as chairman of refreshments on the course will help

Loyola Alumni have a good golf outing. . . . Word has come through that the 40th wedding anniversary of Dr. Liermann, our retired member, was quite an affair. Open house and a string of visitors made him quite happy. . . . Joe Ullis started his year as president of the Chicago Alumni Chapter of the Zips with attendance at a national meeting in St. Louis. He comes back full of vim and ideas. Good luck, Joe. . . . Your correspondent attended the meeting of the Chicago City Council at which the Council was to decide about Fluoridation. Apparently this sort of thing doesn't interest our general membership. Dentists were conspicuous by their absence. That the matter was delayed until June 16, was not because of any help from our dentists. Let us hope that the result will be for the benefit of the general public. . . . LaMar Harris has taken great pains that your correspondent undo a wrong, that apparently and unwittingly he committed. LaMar is NOT moving to Utah. He has just simply built for himself and family a summer retreat. While on these vacations he will not divorce himself entirely from dentistry. I hope that squares me with LaMar. Florence Harris and her daughter both went through a period of mumps and scarlet fever. They are fully recovered now. . . . The branch extends to Mrs. John Gates its sympathies on the loss of her mother. . . . To Jerry Rund—we know how close you and Joey Rund were during the many years of dentistry. We are sure that she was a real support during moments of stress. We all want you to know how much we feel with you. We, too, will miss that kindly figure that was always at Jerry's side. . . . Word has reached this correspondent that one of our real old timers is at Norwegian American Hospital. John McCallum has been at the hospital for about three weeks. There must be something wrong with our spy system. News about neighbors, especially when they could use company, should be one of our first considerations. A good welfare committee doesn't function on thin air, it needs help from all the members. Call John at BR 8-8800,

and say hello. The walls can get very uninteresting after a while.—*Ben Davidson, Branch Correspondent.*

KENWOOD-HYDE PARK

I get some of my news from the FORT-NIGHTLY, wherein I see that Howard Strange has been around to some of the other meetings. Well, we miss him even if he does have two offices. We hope that he doesn't get in too thick with that other bunch because we want him too. . . . In case any of you have mother-in-law trouble, you may have felt like I did when mine claimed the last two weeks in May would be hot, well she got off easy this time because it was nice and not too warm. . . . I hope that everyone had a good, safe holiday and that there were no cases of being cooked alive. I put up a back yard fence, then the next day put the primer on it and now when the next nice Wed. comes along I can put on the green paint. Do I hear any offers to do it??? There is one advantage about being out in the sun and getting all of those vitamins and that is the nice tan that you can get, no, I am not sunburned. . . . Boy, oh boy, was that golf outing a real good one. Those of you that missed it sure missed a real good time. The weather was perfect and the food was even better. At first, it was thought that there wouldn't be enough to make the reservation, but we fooled them. In fact, there were too many there, otherwise I might have been able to have seconds on the food. . . . The golf scores were sure close, I played the last nine with the Fishers and there was a real game, I am still waiting for my pay because I didn't help Wayne's score at all. Clinton won for the eighteen, but I think I helped enough so that he should give me some of the credit. Wayne was ready to throw away his clubs when I made a better drive than he did, and I haven't done much playing in the last twenty years. . . . I don't know just how this should be taken, but W. Fisher claimed

(Continued on page 24)

DIRECTORY CHICAGO DENTAL SOCIETY

Central Offices: 30 N. Michigan Ave., Chicago 2, Ill., Phone Randolph 6-4076

Kindly address all communications concerning business of the Society to the Central Office

Officers

Samuel R. Kleiman
Gustav W. Solfronk
Harry W. Chronquist
L. W. Michael Hughes
Edward W. Luebke

President
President-Elect
Vice-President
Secretary
Treasurer

Amy L. Nelson
Karl S. Richardson

Assistant Secretary
Executive Secretary

Publication Staff

Edward J. Sullivan
Karl S. Richardson
Marion L. Harvey

Editor
Business Manager
Editorial Assistant

Committee on Dental Health Education

Robert M. Appleman
Edgar T. Stephens

Chairman
Program Director

Directors

Walter J. Nock
B. Placek
William O. Vopata
Ernest Goldhorn
Olan B. Kibler
Wayne L. Fisher
Neil A. Kingston
Walter E. Kelly

North Side, 1955
Northwest Side, 1955
West Suburban, 1955
Englewood, 1956
North Suburban, 1956
Kenwood-Hyde Park, 1957
South Suburban, 1957
West Side, 1957

Editorial Staff

James N. Lynch
Orville C. Larsen
W. I. McNeil
Charles Maurice
Donovan W. Brown
Frank J. Orland

Abstract Editor
Scientific Editor
Loyola
U. of Ill.
N.U.D.S.
Zoller Clinic

Branch Officers

Englewood Francis J. O'Grady, *President*
Theodore H. Vermeulen, *Sec.*
Kenwood-Hyde Park Mark C. Reardon, *President*
Graham O. Davies, *Secretary*
North Side Maurice S. Altus, *President*
Earl S. Elman, *Secretary*
Northwest Side Casimir J. Rogalski, *President*
Folmer Nymark, *Secretary*
North Suburban Herman P. Kelder, *President*
Francis M. Yager, *Secretary*
South Suburban Kenneth C. Washburn, *President*
Frederick G. Waldschmidt, *Sec.*
West Side Fred N. Bazola, *President*
Irwin Robinson, *Secretary*
West Suburban Lyle W. McNamara, *President*
Wallace N. Kirby, *Secretary*

Ethics Committee

Sol A. Shiret 1955
Edmund B. Kirby 1956
Eugene M. Stearns 1957

Branch Correspondents

Romaine J. Waska *Englewood*
800 W. 78th St., STewart 3-7800
Warren H. Lutton *Kenwood-Hyde Park*
2261 E. 95th St., ESsex 5-3820
Joseph W. Gordon *North Side*
1144 Bryn Mawr, LOnge Beach 1-4564
Benjamin P. Davidson *Northwest Side*
3324 Diversey Ave., ALbany 2-6676
Frederick S. Verink *North Suburban*
636 Church St., EVanston, DAVis 8-5720
Herman Gornstein *South Suburban*
1603 Halsted St., Chicago Heights
Chicago Heights 185
Frank J. Kropik *West Side*
2929 N. Central Ave., SPring 7-4838
Robert G. Randolph *West Suburban*
23 W. Calendar, La Grange, FLEetwood 2-4373

Applications for Membership

The following applications have been received by the Ethics Committee: Any member having information relative to any of the applicants, which would affect their membership, should communicate in writing with Sol A. Shiret, 25 E. Washington St. Anonymous communications or telephone calls will receive no consideration.

Applicants

HOYT, THOMAS D. (Loyola 1953) North Side, 1438 Sedgwick St. Endorsed by E. F. Dale and Warren H. Lutton.



the "NEW LOOK"...

HAVE YOU SEEN IT?

Here is a completely new concept of the modern esthetic denture which offers:

- ... Faithful anatomical reproduction of natural gum contours
- ... Amazingly natural simulation of living tissue color
- ... The lifelike forms and beautiful qualities of healthy natural teeth

Ask your Trubyte Dealer or Dental Laboratory to show you the new Trubyte Bioform Veneer Denture and make your own comparison test. You'll agree the "New Look" offers a new and distinctive service for all your denture patients.

THE DENTISTS' SUPPLY COMPANY OF N. Y.

York, Pennsylvania

Trubyte NEW HUE Teeth • Trubyte NEW TYPE

FRINK DENTAL SUPPLY CO.
4753 Broadway
Chicago 40, Ill.
Long Beach 1-3350 1-3351

**YOUR LOGICAL SOURCE OF SUPPLY
FOR THE BEST IN
PORCELAIN AND PLASTIC TEETH**

Trubyte BIOFORM® Teeth
the first "vacuum-fired porcelain" teeth

Trubyte DENTRON® Teeth
The plastic teeth with the 10 advantages

HUE Teeth
FORM Teeth
RON Teeth
UE Teeth
M Teeth
ON Teeth
HUE Teeth

Classified Advertising

Rates: Effective Jan. 1, 1952. \$2.75 for 30 words with additional words at 3 cents each. Minimum charge is \$2.75. Charge for use of key numbers is 25 cents additional. Forms close on the 1st and 15th of each month. Place ad by mail or telephone to

CHICAGO DENTAL SOCIETY
30 NORTH MICHIGAN AVENUE
RAndolph 6-4076

Advertisements must be paid for in advance.

FOR SALE

For Sale: Active growing practice in South Shore area. Office space includes reception room, business office, large operating room, good size laboratory and dark room. Fully equipped, including Aident. Owner going into specialty; will stay to introduce. Telephone ESsex 5-0616.

For Sale: By retired dentist—at a bargain. Used equipment—Ritter chair, wall-type engine, sterilizer and stand, bracket table, mahogany cabinet; operating, laboratory and miscellaneous instruments. No unit. EUclid 6-4209.

For Sale: 3-chair office, fully equipped, on busiest corner of Northwest Side of Chicago. For quick sale, what am I offered? Call HUmboldt 6-5815.

Must discontinue my dental practice at once. My two operating rooms, x-ray, laboratory and reception room furniture must be sold at highest offer immediately. Telephone STate 2-2133.

For Sale: Dr. Krutcher unit, S. S. White chair; surgical cabinet—mahogany finish. In excellent condition. \$400.00. Call TOWnhall 3-5349 or RIVerside 7-6497.

For Sale: Dental office—established practice of 25 years. Excellent location on North Side. Telephone AMBassador 2-2889.

For Sale: Large & small electric inlay ovens, model vibrator, Perfection casting machine, Rose Ionization machine, Eastman developing tank, Heidbrink gas machine, 3 cylinders, forceps, pliers, 4 radiator covers, desk & chair, sterilizer. Call LAFayette 3-6163, Tuesdays and Fridays.

For Sale: Western suburb—active practice, modern cream-white equipment, x-ray, air-conditioner, lab, dark room. Low rent; good income. Reasonable. Address R-6, The Fortnightly Review of the Chicago Dental Society.

For Sale: S.S.W. No. 3 unit, Diamond chair, American cabinet, lab engine, lab bench, x-ray with oil immersed tube, developing tank, dental instruments, high-fusing porcelain furnace, Wiggle-Bug amalgamator, etc. Phone MErrimac 7-4474.

For Sale: Established dental office, fully equipped. Will also sell equipment separately—S. S. White Diamond chair, S. S. White unit, American cabinet, Service table. Excellent condition, reasonable. Leaving city. Call HUmboldt 6-1161.

FOR RENT

Fully equipped, nicely decorated office available on Monday, Tuesday and Wednesday on rental basis. Field Annex Building. DEarborn 2-1774.

For Rent: Doctor's office, laboratory and apt. 6-room—modern—2nd floor. 3245 Fullerton Ave., corner Spaulding; established location for over 25 years. Apply to N. Eisenstadt, ALbany 2-2112.

For Rent: Fully equipped dental office including use of x-ray. North exposure. Pittsfield Building. Address R-3, The Fortnightly Review of the Chicago Dental Society.

Office For Rent: Dentist's office in old established location above drug store. For information, call WEllington 5-8464.

For Rent: 6100 Diversey Medical Arts Center, newly completed air-conditioned medical building—2-chair dental suite designed to your specifications. Beautifully designed central reception room. Brochure on request. Telephone HUmboldt 6-1310.

For Rent: One room of a 3-chair dental office, fully equipped, on busy transfer corner of Northwest Side of Chicago. With opportunity to buy. HUmboldt 6-5815.

WANTED TO PURCHASE

Wanted: Now or in the near future, an established dental office in north or northwest Chicago or suburb. Address R-5, The Fortnightly Review of the Chicago Dental Society.

WE CAN ASSIST YOU

If you are an employer needing help . . .
If you are an employee seeking a position

SHAY MEDICAL AGENCY

Suite 1935, Pittsfield Bldg., 55 E. Washington St.

Telephone STate 2-2424

A complete service in medical and dental personnel . . . Nation Wide

HELP WANTED

Wanted: Dental technician for hydrocolloid and precision type work; high caliber man. 40 hours per week. Address R-4, The Fortnightly Review of the Chicago Dental Society.

Wanted: Dental assistant, four-day week. Lincoln-Belmont-Ashland. Salary commensurate with experience. BUCKingham 1-8320, Monday through Thursday.

ASSOCIATION OR SITUATIONS WANTED

Young Dentist, 27 years old, service recently completed, desires part time association, preferably on far Southwest or Southeast side or Loop area. Address R-7, The Fortnightly Review of the Chicago Dental Society.

DENTAL ASSISTANT TRAINEE: A charming June graduate who is exceptionally mature for her years has filed an application with us. Her work experience includes Summer jobs for the past 3 years. She is now seeking a permanent position which offers stability and an opportunity to learn. For information on the above applicant and many others, call RAndolph 6-3837, GARLAND MEDICAL PLACEMENT. THERE IS NO COST OR OBLIGATION TO YOU.

Dentist with no personal practice, member of Chicago Dental Society, will maintain your practice on percentage basis while you are on vacation, sick absence, or called into the army. Address R-8, The Fortnightly Review of the Chicago Dental Society.

Experienced Dental Assistant desires position with dentist. Southwest area of Chicago. Call BEverly 8-2276.

OPPORTUNITIES

Wanted: Associate dentist in general dentistry, full or part time, in South Suburban office located in a new modern community. Address R-2, The Fortnightly Review of the Chicago Dental Society.

Wanted: Dentist for new ground floor medical and dental center with established physicians in one of the busiest, most densely populated neighborhoods in Chicago. Space for two chairs. Should be extremely profitable for right party. Dr. George Barnett, South Side Medical and Dental Center, 223½ East 47th St., WAGner 4-7050 or ESsex 5-3377.

MISCELLANEOUS

HYPNOTISM INSTRUCTION: Evening classes. Under direction of Edwin L. Baron, Ph.B. Hypnotism Institute of Chicago, 64 West Randolph Street, Chicago 1, FRanklin 2-4188.

DO YOUR OFFICES FIT YOUR PRACTICE?

Our Planning Department will without obligation, design offices to give you real efficiency and to eliminate waste of space.

We welcome your inquiries

at

one of Chicago's finest modern medical buildings

at

Washington Blvd. & Wabash Ave.

GARLAND BUILDING

Bell & Hefter
MANAGEMENT

111 No. Wabash Ave.

CEntral 6-8524

Art Schroeder and Technicians

*Our
35th
Anniversary*

**OFFER A COMPLETE MODERN SERVICE
IN ALL PHASES OF PROSTHETICS**



**WE
PROCESS**

J E C T R O N[®]

THE BEST FITTING DENTURE EVER MADE



SCHROEDER CREATIONS



SCHROEDER'S

**Expert Dental Technicians,
4032 Milwaukee Avenue, Chicago 41, Illinois
ALL PHONES AVENUE 3-4710**

**FOR THE
*Very Finest***

WE ARE PRIVILEGED

to serve a most exacting group of dentists who insist on "better" laboratory service.

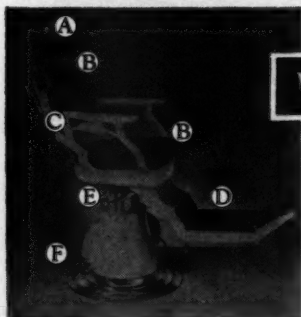
There is a difference — and you also will enthuse when you place restorations properly engineered and finished by

GEO. PTACK Dental Technicians

FRanklin 2-2708

55 E. Washington St.,
Chicago 2, Illinois

MODERN in Every Way



WEBER

Model FM

Zenith
Chair

A—Adjustable cradle-type headrest with improved lock-lever. B—Exclusive sponge rubber form-fitting back and seat cushion. C—Exclusive Weber Spring Compensating Arm. D—Solid rubber footrest pads. E—Quiet, powerful motor. F—All controls within easy reach from either side of the chair. 8 beautiful colors.

See it in our showrooms.

M. LARSON COMPANY, INC.

225 N. PULASKI ROAD
CHIC 60 24, ILL. VAn Buren 6-8070

NEWS OF THE BRANCHES

(Continued from page 18)

that the day was the anniversary of his 28th year of married life (so he goes and plays golf). We know that the Fishers have had a very good life and we wish them many more years together. . . . W. Johnson was claiming that he had won an Oscar, we will not try to tell about it but if you get a chance, ask him to show it to you. . . . Those that came out had a good time and we feel sorry for the rest of you for not coming out and enjoying the good fellowship that we had. The Tom Collins were very good and I didn't see anyone turn them down. . . . Under the Peoria system, Bill Vandran got the low gross for the visitors and Clinton Fisher got it for the members; me, I got high gross for everyone. . . . Let's have the news about your trips and vacations so that we can fill some space and show the other branches that we go places too. This is all for now.—Warren H. Lutton, Branch Correspondent.

WEST SUBURBAN

In a past issue I asked that anyone who had a bit of news that he might tell a friend, tell me about it. It seems that either the members of this branch have no friends, or they are all hermits who never get out of their offices and find out what is going on. . . . We are both sad and glad that our friend Larry Koch of 4816 W. Cermak Rd., Cicero, is retiring to his farm at 1323 Palatine Rd. He is going to take a well-earned rest after spending 38 years practicing dentistry in the same block in Cicero. Larry will become a life member of the Chicago Dental Society next year as a climax to his years spent in dentistry, having graduated from the U. of Ill. in 1916. We are sure that he will be quite busy with all of his outside interests, such as fishing, running the farm and so on, but we hope that all of his friends will at one time or another stop at the farm and say "hello" to him; the farm is only a mile

and one-half to the West of Palatine. . . . Out in this same area we understand that Quent Mangion has built a home. It must really be a big one for something was mentioned about 30 acres around it. . . . We are proud to hear that Paul Topel is going to be a "cover boy" now. He is furnishing the front for the Eastman Kodak (or for a well-known dental publication) magazine with a photograph entitled "Cement Mixer." Good for you, Paul. . . . Those men-about-town, E. Walters, W. Vopata and R. Atterbury, were called upon to escort a "cleaned" Guy Miller from that wing-ding Monte Carlo night that the Study Club had just recently. Guy informs us that this process was done in many new and varied ways, some more pleasant than others. . . . Old news is better than no news, so send it in, please.—*Bob Randolph, Branch Correspondent.*

ENGLEWOOD

Swish! Pediculous weather, wot? It's hotter than a Sear's shotgun at a skeet meet and I was glad to get back to the Amalgam Mill's air-conditioned atmosphere after enjoying the Mother-in-law Special Blue Plate (hot tongue) Lunch-eon at the local poison palace. And here I am tapping out this tripe with one finger instead of the usual two. It all came about when this guy sez to me, "How long are you in the office tonight?" and I sez, "Oh, about five feet eight." My Uncle Charlie Papik, which is an orthopedic surgeon, assured me that no bones were broken, but this one-winged key-poking takes a l-o-n-g time. So leave us be off to the nooz items. . . . Helper H. L. Reed reports that Jack and Mrs. Manning spent the Decoration Day weekend at the Dells, Wisc. Jack knows it was their first stay at the hotel 'cuz they haven't got one of the towels at home. . . . Bill Hillemeier started out with laryngitis and finished up in the hospital with P-noomonia. We wonder if this was one of those cases in which the M.D. couldn't cure the former but did know what to do about the latter? At last report, Wil-

21 Years

PROFESSIONAL MEN ONLY

- An experienced service helping doctors save time and money
- Business problems
- Income taxes
- Office systems and records
- Auditing

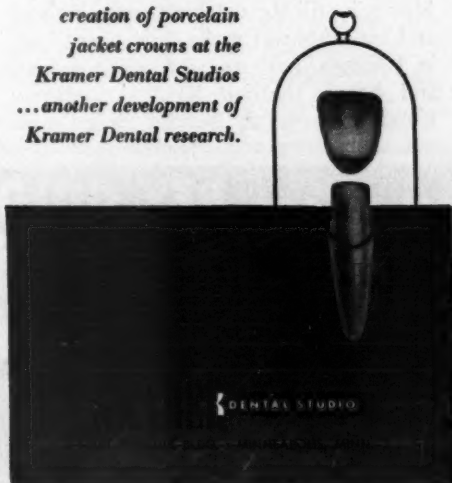
J. P. REVENAUGH
H. F. KEISTER
59 E. MADISON ST.

PROFESSIONAL BUSINESS MANAGEMENT

STATE 2-2262

THE *Kramer* VACUUM FIRING OVEN

For new excellence in the
creation of porcelain
jacket crowns at the
Kramer Dental Studios
...another development of
Kramer Dental research.



liam was not yet back on the job. . . . Vern Eklund and family drove to the West coast and liked it so well that they did not get back home 'til the 22nd, making it a one-month trip. . . . Ray Van Dam took time out May 25th for a week of puttering around the old homestead. It is reported that Ray painted the screens with a brush tied to the end of his putter. . . . Li'l Chum Larry Lucas (the man who *finished* the Beguine) spent the Decoration Day holiday laying several *tons* of flagstone around his Michigan shack. What gives, Larry, balancing the joint down? . . . George Berning is using up his compensation chips after his shoulder-dislocating fall in a downtown department store. Musta been the *slip* department, huh George? . . . Let me take this opportunity to thank the three unknown friends who sent me Paper Mate re-fills. Now let me see. 70,000 times three. Hmmm. Well, it *must* be a whoppin' lot of words. . . . Hail the Warfields! Dr. and Mrs. E. C. Warfield moved to San Jose, Calif. just as soon as the ink was dry on daughter Virginia's Morgan Park High diploma which she received on June 15th. This is to be a permanent move, so note the new address for your future correspondence. It is 2206B Business Circle, San Jose, Calif. Son Roland was married on June 9th. It was a lovely wedding—veddy formal—white shotgun. Seems the Wedding March is still the catchiest tune. Roland and his bride will make their home here in Chicago, and we wish them a long and happy married life. . . . Harry Kazen and Ralph Rudder claim their

boats are without peer. Gosh, fellas, how the heck do you tie 'em up? . . . "Prof" and Mrs. M. Sorley have sold their interesting home in Palos Park and are soon to take up residency in the Hotel Windermere Middle. I was too late to unload my old Army tent. . . . Don Wheeler left June 14 for California to attend daughter Gail's graduation; expected to be away two weeks. . . . Emil J. and Mrs. Olivi joined the White Sox tour to New York City, June 11 to 14, to see the teams play and to take in all points of interest while there. Mrs. Olivi is convalescing after surgery and is getting along fine. . . . The Ed Scanlan tribe took in the Memorial Day P-rade in Naperville. I kinda thought it was a heck of a long one, but had no idea it went *that* far. After daughter Mary winds up her studies for the year at Christ the King school she will enter Longwood Academy. Then Ed sez he'll concentrate on his golf game. . . . Me? well I spent the long week-end (1) emptying and (2) shooting up several cases of beer cans with help (2 only) from Joe (pronounced *Djaughe*). Me brudder-in-law had me mixing and pouring cement in between drinks. Wanta see the world's crookedest sidewalk? By the time I got back home you could tell how old I am by counting the circles under my eyes. Had one frightening experience, however. You should see the Storm and Strife knock off three out of five beer cans at seventy-five feet with my heavy barrel automatic!!! All in all, we had great fun except at meal times. The Battle-axe is *so* argumentative she wouldn't even eat food that agrees with her. Put

CALL US FOR **NEY GOLD & TECHNIC**



JEANNE WILKINSON
MANAGER, CHICAGO OFFICE
PITTSFIELD BUILDING, 18th FLOOR

JACK REINHARDT
TECHNICAL REPRESENTATIVE

CEntrol 6-0791

The J. M. NEY COMPANY

Decorative Products  *Since 1812*

down that piano, Mama, you're too old to carry a tune. Only one casualty. Joe picked a bee off a flower and came whoopin' over to me with, "Daddy! I picked up this bug and he isn't insulated at

THE END

P.T. of R., etc.

WEST SIDE

Our President, Fred Bazola, had a busy week at the University of Illinois Dental School. Reason—final exams and graduation for many future young members of our profession. . . . William Bingaman is sporting a new car. We were not informed as to the make; therefore, we cannot report whether it is a Cadillac or a lesser make. . . . John Reilly is bidding time for the next two weeks, then he will make a bee-line for Rhineland, Wisconsin where he will be living a "life of Reilly." . . . Josh Vission is spending the week-ends with his family at Nippersink. . . . Since Harold Epstein did such a remarkable job last year, our new program chairman, Daniel Laskin, is leaving no stone unturned in preparing another fine program to match that of the past year. In his eager-beaver spirit, he has already secured one of the finest array of clinicians. As the saying goes, the early bird gets the worm but Daniel Laskin is not fond of worms and would prefer to have all of you members buy dinner tickets for these coming events instead. The monthly programs will include lectures on the various phases in

Denture Construction. . . . Commander Bob Tuck of the Navy Reserve Corps is on a two-week cruise aboard the *Albany Flatop*. . . . Our former director, Al Sells, while on a fishing trip with some friends in Minnesota, was involved in a typical Robinson Crusoe adventure. It seems that the unpredictable had happened while seven miles away from civilization. As you may have guessed, the motor ceased to function thus causing the party to resort to the old-fashioned method of travel (man-power). Those of us who are well acquainted with Al Sells are wondering if he took his turn at the paddle or remained at the stern of the boat lending his moral support. . . . Notice: Years ago the saying was "Buddy, can you spare a dime for a cup of coffee." Today and in the near future we would like to revive that saying and coin it in this manner, "Buddy, can you spare a dime for a phone call to your West Side Branch editor, Frank J. Kropik." For news trickles in very slowly and your branch editor and his assistants would appreciate this effort. This column is what you make it so how about a little NEWS. Please call me at SPring 7-4838, after 3:30 p.m.—*Frank J. Kropik, Branch Correspondent.*

NORTH SIDE

Well, fellows, the North Side outing came and went, and those of you who missed the great event are the losers. . . . Another reminder to all men who are



THE DOCTORS' SERVICE BUREAU

Owned and Operated by Members of the
Chicago Dental and Medical Societies

offers—

▲ **FREE CREDIT REPORTS**
To keep your losses low

▲ **FREE LETTERS TO DELINQUENTS**
To collect slow accounts at no charge

▲ **A COLLECTION SERVICE**
At less than 25% on average

THE DOCTORS' SERVICE BUREAU • Central 6-6446 • 201 North Wells St.


interested in committee work—you can still get on the one of your choice by calling or writing to Earl Elman, 6350 N. Clark Street. Come on men and pitch in to make this year another big year. . . . Received a very nice letter from R. C. Schuler; he and Mrs. Schuler sailed for Europe on June 16th to visit their youngest son Tom who is stationed in Germany. They will then tour the rest of the continent and return in August. They also are grandparents—their daughter Mary Jane has a fine boy. . . . Ed Griffin is doing oral surgery on his wife who has a broken jaw. He must be a rough character!!! By the way, his wife Helen is doing fine. Thanks for the information Dr. Schuler, I wish more of you men would write to me about things that happen to you or yours. . . . Julius Caplan is taking a course at Tufts. . . . Al Spiro finally is moving into his new home in Skokie. . . . Morrie Gerry tells me that Stanley Buckner wrote of the wonderful time he is having in Europe. . . . Chester Stanley was a welcome visitor at the Uptown Dental Forum last week. . . . Marvin Eissman is the father of twins. . . . Hal Sitron is taking a course in bridge and fishing in Kenora, Canada. . . . Mrs. Sidney Asher recently underwent an operation and we hope is doing well. . . . John Anderson and Herb Gustavson, of the Sanders Study group, attended a get-together in Riverside at the home of William Vopata. . . . Joe Ambrose is building a home in Evanston. Good luck, Joe. . . . Again to repeat, fellows, the North Side branch is as good as we make

it. Let us all get in the swim and help in whatever way we can so dentistry will continue to be on the march.—*Joseph W. Gordon, Branch Correspondent.*

NORTH SUBURBAN

This is a combined "HELLO" as your new branch correspondent, and a request to you all to continue your good work in passing news items, large and small, to your correspondent as you did last year. I personally enjoyed each of Art Freeman's columns, and am well aware that in spite of his imaginative and well organized presentations, he depended greatly on cooperation from the membership in gathering news items. Congratulations, Art, on a smoothly handled job; to match your efforts will be a real challenge. . . . Our President, Herman Kelder, has indicated that July 14th, the date of the Annual North Suburban Golf Outing will be among the outstanding events in our curriculum this year. Don't overlook this date at the Thorngate Country Club. Come out with the gang for all-day golf, dinner, prizes, and chit-chat in the evening. I'm sure you'll feel the pinch of regret when you hear the post-mortems and discover you have inadvertently missed a wonderful time. Check your calendar now. MAKE room for a great time. Help make this the biggest and best outing ever. . . . Jay Welborn, southpaw king of the golf swing, has given up mowing his lawn, practicing shots out of the rough. A super duper "Cooper Clipper" has taken over. Jay mentioned, "The wife seems to operate it so easily." . . . The fishermen in our crowd seem as active as ever. Carl Schramm and Carl Brasmer spent a few days in the vicinity of Hayward, Wisconsin. . . . Bob Whitfield explored the virtues of the sport near Boulder, Wisconsin, and Bob Reinardy brought in a lusty catch from somewhere near the end of the Gun Flint Trail. Bill and Mrs. Redlich enplaned for Montreal, June 8, and from there to Paris, arriving the next a.m. for their annual ski excursion

*Nature's way of
coloring teeth
is thru
fluorescent
and
translucent
substances....
Our jackets
are constructed that way.*



M. W. Schneider Dental Laboratory
27 EAST MONROE STREET
CHICAGO, ILL. CEntral 6-1480

in Europe. Keep the leg safe this year, Bill. . . . Al Parcell recently returned from New York after seeing his mother off to Europe. . . . Dick Lee visited at Annapolis during "June Week" where his youngest brother-in-law was a member of the graduating class. This same brother-in-law involved himself in circumstances connubial immediately following graduation—seems a catching thing this time of year. . . . Jim Best began his vacation somewhere in Michigan on June 12 under the auspices of Uncle Sam and the Air Force, sporting his brand new gold leaves. Congratulations (?), Dick. . . . Art Leaf sent word from Grinnell, Iowa, of his daughter's graduation from Grinnell College. She must be a wonderful girl, Art, such a swell daddy. . . . Grant MacLean says he's already getting tired of walking. His brand new 1954 Professional Men's HOT ROD was delivered on Saturday, June 12; his wife hasn't let him use it since, but BROTHER, what a job!—Buick Century convertible, powder puff blue with black top, white sidewalls, and power everything (seat, windows, steering, brakes—blondes too?). Grant says a light blue, cashmere beret, a foot-long, silver cigarette holder, dark glasses, and a bunny tail bow tie were thrown in with the deal—ZING!! . . . Andy Koller, presently associated with Zenas Shafer in the Carlson building, has completed plans to move his practice to 106 South Northwest Highway, Palatine, Illinois. Andy will arrange a gradual transfer of his work to the new location beginning about June 20, and plans full time in Palatine about the first of September. Sorry to see you go, Andy. We'll miss all the dope on garden equipment and the best deals on a new car. The old saying goes, however, Evanston's loss will be Palatine's gain. . . . Our good friend Milty Dawson is still busy as ever taking, and arguing the opposite side of any question, and with considerable authority. No point of order recognized. . . . Thirty for now, my friends. Please send your items to your branch correspondent, *Fred Verink*, 636 Church Street, Evanston.



A
fine
reputation
for
fine
workmanship

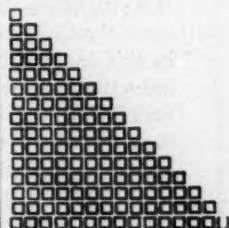
55 E. Washington St.
Chicago 2, Ill.

Best known name in precision Restorations

Steiner laboratories

Precision Attachments
Stressbreakers
Better partial dentures
Cast fixed bridgework
Hydrocolloid
technique

1822-26
Pittsfield Bldg.
FRanklin 2-4316



Doctor:

How would you like to save up to 50% of chair time and a lot of trouble?

We have developed a technique that eliminates any adjustments in the mouth.

For more information about our technique, come in or call.

ANCER DENTAL LABORATORY

Specialists in Precision Cast Gold Work

LOng Beach 1-0519

4554 Broadway Chicago 40, Illinois Room 308

**NITROUS OXIDE-TRICHLOROETHYLENE
ANESTHESIA IN DENTISTRY**

(Continued from page 12)

give the surgeon the best view and the best working conditions for the case at hand. He steadies the head and is constantly observing the pulse, the color, the type of respiration of the patient. During the procedure the trichloroethylene is gradually discontinued; nitrous oxide is discontinued at the end of the operation. We have not made it a practice of flushing the patient with oxygen, believing it to be unnecessary.

DURATION

Cases were from a momentary duration to a few lasting 18 minutes in duration. The majority however were cases that required 3 to 4 minutes. It is of interest to note that in no instance was laryngospasm present and in no instance was an airway, either oral, nasal or endotracheal used or necessary. The inductions required 2 to 3 minutes in children and 3 to 4 minutes in adults. It is of interest to point out at this time that if one uses trichloroethylene more energetically, it is possible to do the induction in a little more than half the time than it was done in this study. However, with more rapid induction, one is more apt to see signs of toxicity of the trichloroethylene. In those cases in which trichloroethylene is used more energetically, one should be very careful to watch for a rapid respiration, rapid or slow pulse, or irregularities of the

pulse. However, in this study none of the signs of toxicity of trichloroethylene was seen.

EMERGENCE

In most instances within a half minute after the nitrous oxide was discontinued, the children moved and responded to the spoken voice. A half minute later they were moved from the dental chair to the cot. In adults approximately three-quarters of a minute after the anesthetic was discontinued, the individual would respond to the spoken voice, but frequently not logically. Approximately a minute later they were all awake, responded logically to questioning, and at most within 2 minutes after the end of the procedure they were with very little help able to walk to the cot. In those instances where the nurse was not available, patients were left in the chair until the team was assured that the swallowing reflex, cough reflex, all the vital reflexes as well as the functions of the higher centers had returned.

COMPLICATIONS

Vomiting or severe nausea occurred in 64 patients or approximately 6.4% of all the cases. It was more frequent in adults than children and more frequent in the males than the females. It was noted that with increased depth of trichloroethylene and with increased duration of the anesthesia, the tendency of nausea and vomiting was increased. In only 6 cases of over 1000 cases was there marked salivation to the degree that it was slightly annoying. There was much more salivation in children than there was in the adults. There was no increase in bleeding noticeable to the surgical team. No cases developed any serious complications. There were no case of cyanosis, of respiratory arrest nor circulatory failure. No stimulants of any kind were needed or used. One patient developed a slight cough during the operative procedure. This was a man who had a very severe post nasal drip.

The failure to achieve anesthesia in

one case must be noted. This was an individual who had had a head injury and had a history of having had several anesthetics, all of which were stormy during induction and emergence. Trichloroethylene and nitrous oxide were utilized to their fullest advantage. This individual never fully went to sleep. It probably was a mistake to have started this anesthetic without a rather heavy basal sedation. Yet, rather than utilize a technique of unnecessary deep trichloroethylene or the exclusion of oxygen, the case was cancelled. He was told to return if he desired a general anesthesia. At that time he would be given premedication and the general anesthesia could then be accomplished.

Three patients of this entire group developed severe struggling during the anesthetic. The operations were accomplished although under some duress. They had no knowledge of the difficulty when they emerged. There was no damage, no bruising; the only thing noticed by the dental team was that the patients were a little tired and it took them a little longer to return to a state of well being. None of these patients were premedicated. One child, a 10-year-old female, had an uneventful anesthesia, yet 10 minutes after the operation was over, she started to cry and developed a rather severe hysteria which lasted for five minutes. The child was an extremely nervous, apprehensive child and we believe this episode to be a simple hysterical phenomenon. It is of interest that we have seen an episode like this in one other case. Patients

who were premedicated because of extreme nervousness all did very well. Six patients developed hilarious laughter during the induction.

TYPE OF WORK

The number of teeth extracted were from 1 to 12, the average being 2 because of the large number of children in this series. Two had impacted molars removed. Two had alveolectomies and 2 were simple incision and drainage procedures. One case had local anesthesia 2 hours prior to the general anesthesia. Since it was not known as to what was used in this local, the patient was asked to wait a full 2 hours and then the general was performed.

In this series, none of the cases had local anesthesia to supplement the general. No tachypnea, no cardiac irregularities or difficulty of any kind was encountered other than those mentioned.

EMERGENCE

During emergence it is important that the patient's head be firmly but gently held in place, the patient be maintained in an upright position so that should he suddenly vomit, the head can be quickly tilted forward and the vomitus will not be aspirated. Suction must be on hand and the patient watched closely. The patient should be talked to, continuously assured that the procedure is over, that everything is fine, and that there is nothing wrong. This statement must be repeated

VACATION ANNOUNCEMENT

OUR LABORATORY WILL BE CLOSED JULY 3rd THRU JULY 18th

*We will be grateful for your cooperation while
our employees enjoy this period of relaxation.*

CASSILL PORCELAIN LABORATORY

1922 PITTSFIELD BLDG.

•

CEntrel 6-0557-8

over and over and over again. Many times the hearing returns long before any of the other faculties. The patient can hear this statement when it is assumed by all that the patient is asleep. He must be watched and never left alone, not even for a few seconds until the reflexes have completely returned. Discourage vomiting as much as possible by asking the patient to take deep breaths and pant like a dog. Don't put an emesis basin under the face of the patient.

COMMENTS BY THE PATIENT AND OPERATOR

Only 6 out of this entire group of 1000 patients commented that the odor of trichloroethylene was slightly unpleasant. The anesthesiologist had no comments to make. The surgeon who had worked under other techniques preferred this technique because the patient's color was always good, there was no danger of explosion, it was economically feasible, the patient awoke more quickly, and he could work more easily and was less tense. He disliked the vinethene technique because of the possibility of explosion, disliked the odor, and had an impression that there was less vomiting and nausea with the technique used than with vinethene-nitrous oxide.

SUMMARY

More than 1000 anesthetics were administered using a nitrous oxide-trichloro-

ethylene technique. The team consisted of an anesthesiologist, an oral surgeon and a nurse in an office having two rooms, one the operating room, the second room being used as a type of recovery room. The team was able to do as many as 20 cases on many afternoons.

There were in this group 1 failure to attain anesthesia and 3 cases in which the anesthetic was not easily controllable. Eight cases during this time were refused anesthesia. There were no complications or sequelae of note. No patient required artificial respiration, supplementation of respiration or analeptics of any kind. This was accomplished in spite of the fact that no premedication was used purposely with the exception of 4 cases in which the patients' extreme nervousness demanded premedication. The anesthesia was induced smoothly and maintenance was easy. The emergence was rapid so that this method compared favorably with local anesthesia as to its speed and efficiency. This technique can therefore be recommended for those in exodontia when adequately trained individuals and equipment are available.

REFERENCES

1. Sadove, M. S., Wyant, G. M., and Spence, J. M.: Trichloroethylene in dentistry: general analgesia, J. Amer. Dent. Assoc. 47: 661 (December) 1953.
2. Sadove, M. S., Wyant, G. M., and Spence, J. M.: Trichloroethylene in dentistry: general anesthesia, To be published in J. Amer. Dent. Assoc.

**CALL US FIRST
STATE 2-5393**

FOR MALPRACTICE AND LIABILITY INSURANCE

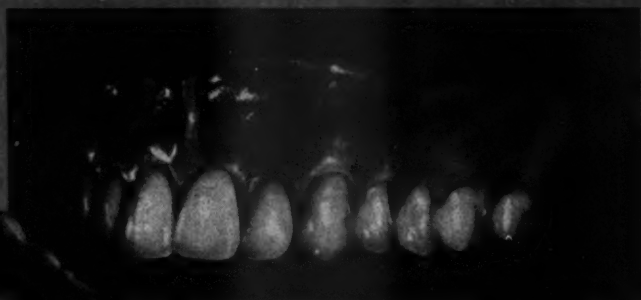
HUNTINGTON AND HOMER, INC.

400 W. Madison Street—(The Chicago Daily News Building)

CHICAGO 6, ILL.

AGENTS FOR THE DISABILITY AND HOSPITAL PLANS OF THE CHICAGO DENTAL SOCIETY

*The ultimate
in denture esthetics*



TRUBYTE BIOFORM® TEETH

THE FIRST VACUUM FIRED PORCELAIN TEETH
... Reproduce the Lifelike and Beautiful
Qualities of Healthy Natural Teeth

and

TRUBYTE® DENTURE VENEERS

... Reproduce the Natural Color of the Living
Tissue and the Anatomy of Natural Gum Contours

Now, for the first time, you can offer *all your denture patients* a completely new concept of denture service—the modern esthetic denture with faithful reproduction of anatomy and amazingly lifelike simulation of natural tissue color. Trubyte Denture Veneers, in combination with the beautiful natural forms and shades of Trubyte Bioform Teeth, open the way to a vast new esthetic denture service.

Never before has it been possible to produce so lifelike, so beautiful, so natural looking dentures—and by such simple and easy to use methods. Ask your Trubyte Dealer or Dental Laboratory to show you the new Trubyte Bioform Veneer Denture. Make *your own* comparison test and you'll be convinced.

The Dentists' Supply Company of N. Y. York, Pennsylvania

Safe! with **DEE GOLD**



Yes, you're **SAFE** when using **DEE GOLD** . . . because the years of metallurgical research enable **DEE GOLDS** to have the right physical properties for each specific use in dentistry. **SAFE** . . . because of the unvarying uniformity found in each composition. **SAFE** . . . because you know your patient will be satisfied.

Write for this **DEE GOLD** folder. It gives the melting range, physical properties, and suggested uses of the different alloys.



BE SAFE ---

USE DEE GOLD



HANDY & HARMAN

DEE PRODUCTS GENERAL OFFICES & PLANT
1900 WEST KINZIE STREET • CHICAGO 22, ILL.
TORONTO 28, ONTARIO, 141 JOHN ST. • LOS ANGELES 63, CALIF., 3625 MEDFORD ST.

